The Impact of a Local Community Engagement Intervention on Residents' Fear of Crime and Perceptions of the Police

Steven Lockey, Les Graham, Tom Redman, and Yuyan Zheng

Durham University

Gillian Routledge and Laura Purves

Durham Constabulary

Introduction

Since 2010, police forces in the United Kingdom (UK) have experienced significant reductions in resources (Her Majesty's Inspectorate of Constabulary [HMIC], 2017a) and have had to investigate new cost-effective methods to improve service delivery to the public (Fraser, Hagelund, Sawyer, & Stacey, 2014). Fisher and Ritchie (2015) argue that improving *community engagement* through increasing *social capital* in communities is one way to help to achieve these objectives.

In a quasi-experimental study we investigate the efficacy of an intervention[1] conducted by Durham Constabulary in a local community area and provide a test of Fisher and Ritchie's (2015) assertion. Statistical analyses were conducted on data, collected at two time points, from residents in an intervention area and a matched control area. Further, we review anti-social behaviour (ASB) statistics over the period to assess the intervention's efficacy in reducing disorder. Finally, in addition to reviewing the efficacy of the intervention, we use structural equation modelling (SEM) to confirm the theoretical distinctiveness of the measures used to test the effectiveness of the intervention and to test a theorised model of the relationships between the variables. We posit that social capital positively influences citizens' perceptions of the police and fear of crime through local area potency. In so doing we contribute to the literature and the understanding of effective community engagement. Myhill (2012, p. 1) defines community engagement in a policing context as '*the process of enabling the participation of citizens and communities in policing at their chosen level*'. Police efforts to engage the citizenry have been argued to enhance public perceptions of legitimacy and improve the service delivered more effectively than the reactive enforcement-

[1] See www.mutualgain.org. Fisher and Ritchie, whose assertions relating to social capital are examined in this paper, are stakeholders in the organisation that delivered the intervention. We confirm that the assessment of the intervention was impartial, and that the authors are independent of the training provider that delivered it.

oriented activities traditionally undertaken by police forces in the UK and abroad (Cosgrove & Ramshaw, 2015; Myhill, 2012; Tyler, 2004). As such, forces in England and Wales have been directed to make community engagement central to their operations (HMIC, 2017a; 2017b; Stevens, 2013).

The primary focus of the intervention studied in this paper was to increase social capital. Social capital is defined as '*the goodwill available to individuals or groups, [the source of which] lies in the structure and content of the actor's social relations*' (Adler & Kwon, 2002, p. 23). Social capital refers to the nature and strength of communication flow amongst individuals embedded within a system. In this context, we examine the beliefs of individual citizens relating to their perceptions of social capital in their local community. The local community is an important research context in policing because one of the traditional pillars of policing in the United Kingdom, policing by consent, requires that the community grants legitimacy to police forces (Jackson et al., 2012). Further, consistent with Coleman's (1988) conceptualisation of social capital we expect that if citizens believe there is a high degree of social capital within their community, they are less likely to be fearful of crime and more likely to hold positive perceptions of the police based on the co-production of community norms and values.

We draw on *group potency* theory to investigate *local area potency* as a psychological mechanism underlying social capital and its outcomes. As per Guzzo and colleagues (Guzzo, Yost, Campbell, & Shea, 1993; Shea & Guzzo, 1987), group potency is the belief members have that their group can be effective. Group potency is a related concept to *collective efficacy* (Stajkovic, Lee, & Nyberg, 2009; Zaccaro, Blair, Peterson, & Zazanis, 1995) which is more commonly studied in the criminology literature (e.g. Gibson, Zhao, Lovrich, & Gaffney, 2002; Jackson & Bradford, 2009; Quinton & Tuffin, 2007). We choose to examine group potency rather than collective

efficacy because the former relates to '*any* task or demand [a group] may confront' (Zaccaro et al., 1995, p. 314), whereas the latter refers to specific tasks or situations (Bandura, 1997). As such, understanding how a group confronts a wide range of challenging, but disparate issues, is more pertinent in our context than how it handles task-specific challenges. To fit our context, we consider the perceptions residents hold about the potency of their local area and study the extent to which individuals in a community believe that they, as a collective, can meet challenges within it. We posit that the positive effects of social capital on perceptions of the police and on fear of crime will be transmitted through local area potency.

We make several contributions to research and practice. *First*, the evidence base pertaining to community engagement intervention trials in UK settings is sparse (Myhill, 2012; see Quinton & Tuffin, 2007, for an exception). This paper provides an additional study through the quasi-experimental investigation of the efficacy of a community engagement intervention. *Second*, we contribute to the social capital literature. Prior studies have shown social capital to be a predictor of crime reduction (Buonanno, Montolio, & Vanin, 2009; Deller & Deller, 2010; Lederman, Loayaza, & Menédez, 2002; Moore & Recker, 2016) and decreased fear of crime (Ferguson & Mindel, 2006). However, this research has been undertaken in non-UK contexts with research designs that do not allow for the examination of the effects of a specific intervention. Therefore, we contribute to the literature and evidence through our examination of the efficacy of an intervention in increasing social capital and determining its influence on fear of crime in a UK context. Further, the link between social capital and perceptions of the police is an area of research that remains underdeveloped (Hawdon, 2008). *Third*, relating to local area potency, empirical work from the US (Gibson et al., 2002) and the UK (Jackson & Bradford, 2009) suggests that belief of the extent to which citizens are willing and able to act for the benefit of their community

is an important factor for reduction of fear of crime. We provide an additional study to investigate this.

Theory Development and Hypothesis Formation

Community Engagement

The European Commission (Europa, 2017) recognises the importance and international significance of investing in community engagement to improve citizens' perceptions of public authorities. Further, extant empirical research, predominantly from the United States (US) (e.g. Pate, Wycoff, Skogan, & Sherman, 1986; Skogan & Steiner, 2004), has shown that community engagement activities can have positive impacts on crime reduction and improve citizens' attitudes towards the police.

Despite theoretical support and the backing of policymakers, Lloyd and Foster (2009) argue that community engagement in the UK remains poorly understood and frequently held in low regard as it is not considered as 'real' police work. Further, they note that community engagement is often poorly implemented. A reason for this may be the lack of evidence around 'what works' relating to community engagement in the United Kingdom (Myhill, 2012). In conducting a quasi-experimental investigation of a community engagement intervention designed to increase social capital, reduce fear of crime and ASB, and improve perceptions of the police, we provide an important contribution to the evidence in this field.

Social Capital and Community Engagement

Social capital consists of structural, relational, and cognitive facets (Leana & Pil, 2006; Nahapiet & Ghoshal, 1998). The structural component of social capital refers to connections among actors, specifically, the extent to which they *share information*. Information sharing may

enhance cooperation and mutual accountability (Sparrowe, Liden, Wayne, & Kramer, 2001). The relational aspect refers to the personal relationships people in a network have developed with each other over time (Nahapiet & Ghoshal, 1998), with a critical attribute being the *trust* between actors. Building trust facilitates collective and collaborative action in the absence of specific mechanisms to foster such behaviours (Coleman, 1988). The cognitive dimension of social capital relates to the development of a *shared vision*. That is, as people interact with each other as part of a network, they can develop a common set of goals, which in turn promotes a sense of shared responsibility and collective action (Coleman, 1988). The cognitive dimension of social capital both reinforces and is reinforced by the structural and relational components; people with shared values and goals are likely to have strong relationships and are thus more likely to trust each other, interact regularly and exchange information (Leana & Pil, 2006).

The design and delivery of the community engagement intervention is underpinned by social capital theory. Specifically, the intervention aimed to encourage a paradigm shift in the way the police and their partners view and engage with citizens in a local community and through this change achieve an increase in social capital in a local community area. In developing a community engagement intervention that considers citizens as assets to be actively harnessed in the maintenance of their environment, rather than passive customers to be appeased, the police are better placed to develop positive relationships with citizens (Fisher & Ritchie, 2015). The development of positive relations should result in citizens holding more favourable perceptions of the police and a reduction of fear of crime due to the belief that their community is safe in that help is available if needed (Vieno, Lenzi, Roccato, Russo, & Monaci, 2016). Based on expectations that the community engagement intervention will have positive effects in the local area in which it was implemented, we propose the following hypotheses:

Hypothesis 1: There is a significant increase in social capital (Hypothesis 1a), local area potency (Hypothesis 1b), confidence in the police (Hypothesis 1c), police community focus (Hypothesis 1d), and a significant decrease in fear of crime (Hypothesis 1e) from time 1 to time 2 in the intervention area that is not evident in the control area.

Myhill's (2012, p. 3) review of the available research literature found 'fairly strong positive evidence' that community engagement initiatives are positively associated with improved public perceptions of ASB. To investigate whether this is true for this intervention we also assessed the changes in ASB levels and propose the following hypothesis for investigation:

Hypothesis 2: There is a significant decrease in ASB from time 1 to time 2 in the intervention area that is not evident in the control area.

Theoretical Model

In addition to investigating the efficacy of the intervention, we also test a conceptual model that explores the relationships between the constructs measured. In the following section, relevant literature is discussed and hypotheses are developed for testing. Our theoretical model is shown in Figure 1.

Figure 1 about here

Social Capital and Fear of Crime

Prior literature has consistently shown that social capital has positive effects on crime reduction (Buonanno et al., 2009; Deller & Deller, 2010; Lederman et al., 2002; Moore & Recker, 2016).

The existence in the UK of a 'perception gap' between actual crime figures and perceptions of crime has been identified (Duffy, Wake, Burrows, & Bremner, 2008; Flatley, 2015) and it may be that citizens' perceptions of crime, rather than the actual crime rate, is more important for their quality of life and how they perceive the police. As Smith (2007, p. 44) posits, 'if crime falls, but people do not see and feel that fall, their quality of life is affected and the benefits of reduced crime are not being realized.' Empirical studies undertaken in non-UK contexts indicate that people in areas with higher levels of social capital are less fearful of crime (Vieno et al., 2016; Yuan & McNeeley, 2016). To date, there is little empirical evidence to support this relationship in a UK context. However, Jackson and Bradford (2009) found a relation between social cohesion (i.e. number of people known and trusted in the local area) and fear of crime, indicating that the more people an individual knows and trusts, the less likely they are to be fearful of crime. Thus, we propose the following hypothesis:

Hypothesis 3: Social capital is negatively related to fear of crime.

Social Capital and Perceptions of the Police

We also suggest social capital will improve citizens' perceptions of the police. Specifically, we measure confidence in the police and perceptions of police community focus. High levels of social capital are likely to result in the co-production of community norms and values (Coleman, 1988), and the co-production of community values will lead to a closer connection to government service bodies, such as the police (MacDonald & Stokes, 2006). In the US, MacDonald and Stokes found that individuals' perceptions of community social capital were positively associated with trust in the police. In the UK, concerns about long-term social change in the community (for instance, if

people did not feel a sense of belonging in their neighbourhood) were shown to be related to low expectations of police effectiveness (Jackson & Bradford, 2009). We therefore propose:

Hypothesis 4: Social capital is positively related to confidence in the police.

Hypothesis 5: Social capital is positively related to perceptions of police community focus.

Local Area Potency: Linkages to Social Capital and Crime

While the intervention aimed to increase community engagement through the development of social capital, we also believe it will increase local area potency. We base this assertion on the findings of Gibson and colleagues (2002), who investigated the effects of social integration and perceptions of collective efficacy on fear of crime in three US cities. They showed that, while social integration was an important initial factor in predicting fear of crime, collective efficacy was a stronger predictor and mediated the relationship between social integration and fear of crime. Social capital and social integration are related concepts (Kawachi & Berkman, 2000). Social capital is likely to be the first step in developing local area potency. The more citizens can trust each other, share information and develop a shared vision for the community, the greater the sense of familiarity they should have. We posit that if individuals feel a sense of familiarity with others in the community, this will lead to the formation of a sense of local area potency and propose the following hypothesis:

Hypothesis 6: Social capital is positively related to local area potency.

We expect local area potency to mediate the relationships between social capital and the project-specific outcomes because high levels of local area potency should lead to citizens feeling safer and motivate them to hold positive perceptions of the police. Although there is no direct evidence

to support these relationships, previous research into relations between collective efficacy and crime (i.e. Gibson et al., 2002; Jackson & Bradford, 2009) provides support for this prediction. Gibson et al. (2002) found that collective efficacy mediated the relationship between social integration and fear of crime. In the UK, Jackson and Bradford (2009) found that concerns about long-term social change in the community were related to concerns about perceptions of collective efficacy, which in turn predicted fear of crime and low expectations of police effectiveness. Nix, Wolfe, Rojek and Kaminski (2015) showed that perceptions of collective efficacy were positively associated with trust in the police in a US sample. Therefore, we propose:

> Hypothesis 7: Local area potency mediates the negative relationship between social capital and fear of crime (Hypothesis 7a), and the positive relationships between social capital and confidence in the police (Hypothesis 7b), and perceptions of police community focus (Hypothesis 7c).

Intervention to Improve Social Capital

Fisher and Ritchie (2015) reported on the efficacy of an intervention methodology for public service organisations to increase their effectiveness in community engagement through increasing social capital in local community areas which results in achievement of positive outcomes for citizens. The approach involves training of public service personnel on alternative community engagement techniques followed by a nine-month programme of delivery. The objective underpinning the design of the intervention is to enable public service organisations to more effectively stimulate and support the development of a more civic society in local communities, where residents are encouraged to be part of establishing and maintaining the environment in which they live.

Durham Constabulary commissioned a team of social purpose educators (MutualGain[2]) to deliver a training and supported implementation package to enable personnel from the force and its partners (Durham County Council and the Office of the Durham Police and Crime Commissioner) to engage with members of the public effectively. The aim of the training was to increase knowledge and skills on approaches that allow local policing to move from a directive approach, where residents are informed on what actions will be taken, to a listening and encouraging approach where residents' input and participation in deciding on issues to be tackled and helping to deliver changes are encouraged.

The initial training of participants (8 police personnel and 7 partner personnel) was delivered over a five-day period. The police personnel that attended were from the command which had responsibility for service delivery and consisted of an inspector, a sergeant, 4 constables and 2 police community support officers. Their tenure in the force ranged from 2 to 28 years (mean of 13.5 years). Partner personnel included a principle area action partnership coordinator, an enforcement manager, a safer communities coordinator, a safer communities officer, two neighbourhood wardens and a re-offending housing solutions officer.

The focus of the initial training was on discussing current community engagement activity for communication and education (e.g. leaflets, open days, fun days, football matches), alternative engagement techniques (e.g. appreciative inquiry for service improvement, the use of focus groups, social media), how to best seek views from individual residents on how to improve services (e.g. speaking to service users, carers, victims of crime, parents, etc.), listening skills (to establish individuals' and community views on issues and priorities), ways to build and encourage social action (e.g. encouragement of community action groups to take responsibility to implement actions

[2] See: https://www.mutualgain.org/

to deal with issues in their neighbourhood area and use of techniques such as participatory budgeting: where representatives from a community decide how to spend money on issues that affect them), and how to help with behavioural changes (e.g. reductions in anti-social behaviour, waste management, etc.).

Members of the public were recruited to participate in the delivery programme in the intervention area by approaching residents in their homes on a random basis and discussing whether they would be interested in participating in the programme. Following this activity, a number of residents were also recruited following word of mouth recommendations from residents. To determine the key issues residents felt they faced, five focus groups were held. Attendance was good (approximately 20 people at each focus group event), with some participants attending without being invited as they had heard about the group via friends and wanted to be involved. An early improvement idea from residents included the need to hold meetings in areas and buildings that are not associated with the council, police, schools, etc. (buildings without 'authority' attached to them). In each focus group, residents raised issues they were concerned about and discussed how individuals in the community could support improvement activity. Residents were enthusiastic to engage in these activities and build positive relationships with the police and partner personnel involved.

Following the focus groups, a participatory budgeting (PB) event was planned where representatives from the community area decided how to spend money on issues that affect them and residents considered and voted on how to best provide community-based services. Funding of £26,000 was secured from a grant and financial support from Durham Constabulary and the local council. Prior to the event, residents were supported and encouraged to propose projects that would provide solutions to challenges and issues they felt existed and were a priority to be solved. In

total, sixteen community groups submitted proposals and then showcased their ideas at the PB event. Over 450 residents from the local area attended the event and voted on the ideas they wished to see implemented. Eight ideas were decided upon, with each being granted between £1,000 and £5,000. Examples of the projects awarded included: improving public spaces, arts and craft sessions for children, setting up a community choir, a 'munch' club to help children and adults to learn to cook and then eat together, and recruitment, training and support for volunteers to help others in the community. All of the projects were successfully implemented.

Study Design

The research used a quasi-experimental design. An intervention designed to improve social capital was conducted in a selected neighbourhood area.[3] A second similar neighbourhood area was selected to act as a control. The geographical area of each area is 1.22 and 2.34 square kilometres, respectively. The population of each area was 3,984 and 5,369, respectively. The percentage of families in low rise social housing with high levels of benefit need were 40% and 38%, respectively, while the percentage of residents with sufficient incomes in right-to-buy social housing were 37% and 40%, respectively. The average monthly ASB incident rates for the two areas for the three months period, prior to selection, were 5.43 and 6.02 per thousand population, respectively. Both areas were in the top 10% of most deprived areas in the UK (Department for Communities and Local Government, 2015).

We collected data at two time points; before the intervention and fifteen months later (six months after the intervention ended). At each time point, postal surveys were sent to every

[3] The areas selected are neighbourhood areas as defined by Durham Constabulary and correspond to a Lower-layer Super Output Area as defined by the Department for Communities and Local Government (2015).

household in the intervention and control areas (1,846 and 2,518, respectively). In total, 995 surveys were returned. The response rates from the two areas, at each of the two time points, was similar (intervention = 12%, control = 12% at time 1; intervention = 11%, control = 10% at time 2). While these response rates could be considered as low, they are in-line with response rates reported in similar research using police-led community surveys (see for example Culpeper Police Department, 2014; Lum, Johnson, Nichols, Grieco, & Wu, 2016; MacQueen & Bradford, 2015).

We removed 145 matched responses across the two time points prior to conducting analyses, so as not to violate statistical method assumptions of independence, leaving a dataset of 850 (367 in the intervention area and 483 in the control area, respectively). In this sample, 47.9% of respondents were male, and 52.1% were female. The mean age was 62 years old, and the mean tenure in the area was 28 years. 43.7% of respondents lived in rented accommodation.

Independent sample *t*-tests indicated that there were no significant differences in the demographic characteristics of respondents from time 1 to time 2 in both the treatment and control areas suggesting that non-response bias was not an issue in our sample. We do however note that, on average, respondents at time 2 in the intervention area were slightly older (time 1 $M = 61.98$, time 2 $M = 65.56$). This difference was marginally statistically significant at the <.05 level, [$t\ (352) = -3.18$, $p = .050$]. The results are summarised in Table 1.

The similarity of the control area, to the intervention area, was further confirmed using independent sample *t*-tests. Differences in average scores for key measures for each area measured before the intervention were non-significant (social capital [$t\ (416) = 0.60$, $p = .550$], local area potency [$t\ (331) = 1.41$, $p = .161$], confidence in the police [$t\ (401) = -0.10$, $p = .921$], police community focus [$t\ (423) = -.09$, $p = .930$], and fear of crime [$t\ (393) = -0.50$, $p = .653$]).

Table 1 about here

Statistics from Durham Constabulary relating to anti-social behaviour (ASB) were obtained for both the intervention and control areas to examine the intervention's influence on ASB. Finally, we investigated the mechanism by which social capital may affect citizens' fear of crime and perceptions of the police through the development and testing of our conceptual model using the survey data.

Measures

The details of the items used in each of the measures are presented in the appendix. Items were rated on a scale from 1 = *strongly disagree* to 7 = *strongly agree*, unless otherwise stated.

Social Capital

We adapted nine items from Leana and Pil (2006) to fit the context of our study. Sample item: 'People in this local area engage in open and honest communication with one another' ($\alpha = .97$).

Local Area Potency

Five items were adapted from Guzzo et al. (1993). The original scale measured group potency. Sample item: 'This local area has confidence in itself' ($\alpha = .92$).

Police Community Focus

One item was adapted from a scale developed by Ren, Cao, Lovrich, and Gaffney (2005), and four were adapted from the 2005/2006 British Crime Survey (BCS), as used by Bradford, Jackson,

Hough, & Farrall (2008), to measure the extent to which citizens perceived the police to have a community focus. Sample item: 'The police in this local area work with citizens together in solving problems' ($\alpha = .95$).

Confidence in the Police

We used three items to measure confidence in the police. Two were adapted from Bradford et al. (2008). Sample item: 'The police are dealing with the anti-social behaviour and crime issues that matter to people in this local area'. Further, the authors developed one item for the purpose of this study: 'How good a job do you think the police are doing in this local area' ($\alpha = .92$). Responses ranged from 1 = *very poor* to 7 = *excellent*.

Fear of Crime

We adapted four items from the 2003/2004 British Crime Study, as used by Jackson and Bradford (2009), to measure fear of crime. We also adapted one item from the Fear of Crime in America survey, used by LaGrange, Ferraro, and Supancic (1992), and one from the Whitehall II survey, used by Jackson and Stafford (2009). Specifically, we adapted items to relate to the extent to which respondents had been afraid of being a victim of crime in the past few months. Responses ranged from 1 = *never* to 6 = *almost always*. Sample item: 'In the past few months, how often, if at all, have you been afraid of the following… being burgled' ($\alpha = .90$).

Control Variables

We included control variables relating to age, gender (0 = *male*, 1 = *female*), tenure in the local area (number of years) and whether the respondent's home is rented. We also controlled for whether the respondent had heard of the intervention and whether they had been a victim of crime

over the past 12 months (both measured as 0 = *no*, 1 = *yes*). Furthermore, we controlled for area (0 = *control*, 1 = *intervention*).

Results

As shown in Table 2 social capital was positively correlated with local area potency (r = .67, p < .01). Local area potency was negatively correlated with fear of crime (r = -.43, p < .01), and positively correlated with confidence in the police (r = .55, p < .01) and police community focus (r = .53, p < .01). These results provided preliminary support for our conceptual model.

Table 2 about here

Intervention Results

We conducted independent samples *t*-tests to examine the efficacy of the intervention on improving citizens' beliefs relating to social capital, local area potency, fear of crime, and perceptions of the police. Results are displayed in Table 3. We conducted independent samples *t*-tests to examine the efficacy of the intervention on improving citizens' beliefs relating to social capital, local area potency, fear of crime, and perceptions of the police. Results are displayed in Table 3. Both social capital and local area potency increased significantly in the intervention area (mean difference = .44, p = .005, and mean difference = .55, p < .001, respectively), but not in the control area (mean difference = .07, p = .597 and mean difference = .14, p = .240, respectively), supporting Hypotheses 1a and 1b. Confidence in the police increased significantly in both the intervention area (mean difference = .60, p < .001) and the control area (mean difference =.35, p = .009). While this result does not support Hypothesis 1c, given that there was a significant

increase in confidence in the police in both areas, we note that the effect size (Cohen, 1988) of the change in scores between Time 1 and Time 2 in the intervention area was greater than in the control area (.48 and .25, respectively). Perceptions of police community focus saw a significant increase in the intervention area (mean difference = .55, p = .001) that was not replicated in the control area (mean difference = .18, p = .180), supporting Hypothesis 1d. Hypothesis 1e was also supported, as there was a reduction of fear of crime in the intervention area (mean difference = -.30, p = .014), that was not evident in the control area (mean difference = -.04, p = .761).

Table 3 about here

We also conducted differences-in-differences (DiD) analyses to determine whether the change in mean values demonstrated by the independent-samples *t*-tests can be confidently attributed to the intervention effect. Specifically, DiD analyses indicate whether the change in the intervention area was greater than the change in the control area. While we were not able to fully test the parallel trends assumption within our differences-in-differences tests, we did include age, gender, tenure in local area, whether the respondent had heard of the intervention and whether they had been a victim of crime over the past 12 months as control variables. Results were generally consistent with those of the previous analysis (see Table 3). Social capital (mean difference = -.29, p = .047), local area potency (mean difference = -.59, p = .011), and police community focus (mean difference = -.38, p = .037) showed significant change. The change in fear of crime was marginally significant (mean difference = .21, p = .051), while the change in confidence in the police due to the intervention was not supported (mean difference = -.26, p = .127).

Anti-social Behaviour Statistics

We reviewed statistics pertaining to victim-based ASB incidents recorded by the police, in the intervention and control areas, for the six months prior to the intervention, for the nine months during the intervention, and for the six months following the intervention. In the intervention area, ASB reduced by 44.7% from a monthly average of 6.27 incidents per thousand to 3.47, for the six month prior to the intervention compared to the six months post the intervention. In the control area the ASB incident rate only reduced by 7.8% from 5.59 to 5.15 for the same periods. The trend for the monthly ASB incidents and underlying linear trend for each of the intervention and control areas are shown in Figure 2. As can be seen, the trend for the intervention area is quite steeply downward while the trend for the control area is much flatter. These findings provide support for Hypothesis 2.

Figure 2 about here

Model Testing

To test our hypothesised model, we performed SEM using MPlus (Muthén & Muthén, 2010). As per Anderson and Gerbing's (1988) two-step approach, we first confirmed the measurement model using confirmatory factor analysis (CFA) to determine the distinctiveness of measures used in our model, before examining the structural model to test our hypotheses.

Measurement model

Our hypothesised model was comprised of five factors: social capital, local area potency, fear of crime, confidence in the police, and police community focus. Results indicate that a five factor model provided a good fit to the data: χ^2 (*df* = 338, *N* = 846) = 1772.72, $p < .001$; CFI = .93; TLI = .93; RMSEA = .07; SRMR = .04. These results provide support for the distinctiveness of the measures used in our study.

Structural model

Social capital was negatively related to fear of crime ($B = -.28$, $p < .001$), and positively related to confidence in the police ($B = .39$, $p < .001$), and to police community focus ($B = .46$, $p < .001$), supporting Hypotheses 3, 4 and 5. Social capital was positively related to local area potency ($B = .63$, $p < .001$), supporting Hypothesis 6.

Local area potency was negatively related to fear of crime ($B = -.30$, $p < .001$), and positively related to confidence in the police ($B = .49$, $p < .001$), and to police community focus ($B = .54$, $p < .001$), as shown in Figure 3.

Figure 3 about here

We examined the mediation effect of local area potency on the relations between social capital and fear of crime, confidence in the police and police community focus, respectively, by conducting a bootstrap analysis with 1,000 samples. Results indicate that local area potency had a significant indirect effect on the relationship between social capital and fear of crime, as indicated by the 95% confidence intervals of local area potency ($b = -.19$, [-.26, -.13]), on the relationship between social capital and confidence in the police ($b = .31$, [.25, .38]) and on the relationship

between social capital and police community focus (b = .34, [.27, .41]). These findings provide support for Hypotheses 7a, 7b, and 7c.

Discussion

The primary aim of this study was to review a community engagement intervention undertaken in a local area under the jurisdiction of Durham Constabulary. Specifically, we reviewed the intervention by determining whether it had achieved its objectives of increasing social capital and three project-relevant outcomes by using a quasi-experimental design and comparing results against a control area. Results indicate that it met these aims, supporting the assertion of Fisher and Ritchie (2015) that community engagement activities can increase social capital. Social capital, local area potency, confidence in the police, and perceptions of police community focus all increased significantly in the intervention area. Fear of crime also decreased significantly, but differences-in-differences analysis indicates that we cannot confidently attribute this decrease entirely to the intervention effect. Only confidence in the police increased significantly in the control area, but the effect size was smaller than in the intervention area. Durham Constabulary has engaged in several innovative initiatives to combat crime and improve public confidence in the period of the intervention review and beyond (Durham Constabulary, 2015; Wright, 2018). This may be a reason for the increase in confidence in the police in the control area. We also compared the average anti-social behaviour (ASB) incident data for the intervention area and control area and found that ASB decreased in the intervention area to a greater extent than that of the control area. This supports Myhill's (2012) findings that community engagement can be effective in reducing ASB.

Finally, we considered how improvements in social capital and local area potency may positively impact citizens' perceptions of the police and reduce their fear of crime. Our

hypothesised model received support. Social capital appeared to drive local area potency, which in turn influenced the study's outcome variables. The indirect effects of local area potency on the outcome variables were all stronger than the direct effect of social capital, supporting our argument that while the perception that people in one's community are tight-knit appears to be a necessary initial step, the belief that the community is *capable* of affecting positive change seems to be particularly important. Thus, we contribute to the social capital literature by demonstrating its importance in citizens developing positive perceptions of the police, an area that had been previously underdeveloped (Hawdon, 2008). Further, while non-UK studies have indicated the importance of collective efficacy, we demonstrate the relevance of local area potency as a mediating mechanism in driving community engagement in the UK.

Practical Implications

Our findings support the observations of Cosgrove and Ramshaw (2014) and HMIC (2017b) that community engagement should not be scorned as the poor relation of enforcement-oriented activities. However, while the intervention appears promising, we must note that a sustained effort is likely to be required to maintain its effects. Research into the efficacy of training shows that effects typically trail off over time (Goldstein, 1980), and evidence indicates that community engagement activity requires consistent effort from both the police and the public (Myhill, 2012). To maintain the effectiveness of the programme it may be necessary to monitor the effects of the intervention longer-term.

Strengths, Limitations, and Directions for Future Research

A strength of this study is that we assessed the intervention from three perspectives: examining changes over time for both survey data and objective ASB incident statistics, and through the

testing of a theoretical model to explain the relationships between the variables and provide evidence that the underpinning theory of the intervention was an effective mechanism for the improvements achieved.

While we utilised a quasi-experimental design to assess the intervention, a limitation of this research is that the areas were not randomly selected. Although randomised control trials are the 'gold standard' of evidence-based practice (Scantlebury et al., 2017), this was not possible in this study due to the need to select the intervention and control areas to be as similar as possible. A further limitation is that our findings may not be generalizable to local community areas that have different demographic and economic characteristics to those in this study. Future research in different contexts will provide greater confidence on the generalizability of our findings and the efficacy of this kind of intervention to achieve positive outcomes for local communities in different contexts. In addition, while we measured the variables and considered the changes in ASB from just before and then six months after the intervention, it would be useful to consider the sustainability of the impact from the intervention. Further, social capital was measured at the individual-level in the current study, as collecting community-level data was not possible. Future studies could measure both levels of social capital.

Conclusion

Our findings indicate that the intervention met its objectives over the period assessed, and support Fisher and Ritchie's (2015) assertion that community engagement can increase social capital and achieve positive outcomes for citizens. We theorised that social capital would increase local area potency, which in turn would decrease citizens' fear of crime and improve their perceptions of the police. This model was supported. Anti-social behaviour incidents also reduced to a greater extent in the intervention area compared to that of the control area.

References

Adler, P. S., & Kwon, S. (2002). Social Capital: Prospects for a New Concept. *Academy of Management Review*, *27*(1), 17–40

Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, *103*(1), 411–423.

Bandura, A. (1997). *Self-Efficacy: The Exercise of* Control. New York: Freeman & Company.

Bradford, B., Jackson, J., Hough, M., & Farrall, S. (2008). *Trust and Confidence in Criminal Justice: A Review of the British Research Literature*. Retrieved from http://ssrn.com/abstract=1303567.

Buonanno, P., Montolio, D., & Vanin, P. (2009). Does Social Capital Reduce Crime? *Journal of Law and Economics*, *52*(1), 145–170.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences, 2nd Edition.* Hillsdale, N.J.: Lawrence Erlbaum.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.

Cosgrove, F., & Ramshaw, P. (2014). It is what you do as well as the way you do it: The Value and Deployment of PCSOs in Achieving Public Engagement. *Policing and Society*, *25*(1), 77–96.

Culpeper Police Department. (2014). *2014 Community Survey Results*. Culpeper, VA: Culpeper Police Department.

Deller, S. C., & Deller, M. A. (2010). Rural Crime and Social Capital. *Growth and Change*. *41*(1), 221–275.

Department for Communities and Local Government. (2015). *The English Indices of Deprivation 2015*. London.

Duffy, B., Wake, R., Burrows, T., & Bremner, P. (2008). *Closing the Gaps: Crime and Public Perceptions*. London: Ipsos MORI.

Durham Constabulary. (2015). *Durham Constabulary Performance*. Retrieved from https://www.durham.police.uk.

Europa. (2017). *Community Engagement/Empowerment*. Retrieved from https://ec.europa.eu/.

Ferguson, K. M., & Mindel, C. H. (2006). Modeling Fear of Crime in Dallas Neighborhoods: A Test of Social Capital Theory. *Crime & Delinquency*, *49*, 1–27.

Fisher, A., & Ritchie, S. (2015). A Functional Shift: Building a New Model of Engagement. *Policing*, *9*(1), 101–114.

Flatley, J. (2015). Crime Statistics, Focus on Public Perceptions of Crime and the Police, and the Personal Well-being of Victims. London: Office for National Statistics.

Fraser, C., Hagelund, C., Sawyer, K., & Stacey, M. (2014). *The Expert Citizen*. London: Reform.

Gibson, C. L., Zhao, J., Lovrich, N. P, & Gaffney, M. J. (2002). Social Integration, Individual Perceptions of Collective Efficacy, and Fear of Crime in Three Cities. *Justice Quarterly 19*(3), 537–564.

Goldstein, I. L. (1980). Training in Organizations. *Annual Review of Psychology, 31*, 229–272.

Guzzo, R. A., Yost, P. R., Campbell, R. J., & Shea, G. P. (1993). Potency in Groups: Articulating a Construct. *British Journal of Social Psychology*, *32*(1), 87–106.

Hawdon, J. (2008). Legitimacy, Trust, Social Capital, and Policing Styles: A Theoretical Statement. *Police Quarterly*, *11*(2), 182–201.

Her Majesty's Inspectorate of Constabulary. (2017a). *State of Policing: The Annual Assessment of Policing in England and Wales 2016*. London.

Her Majesty's Inspectorate of Constabulary. (2017b). *PEEL – Police Effectiveness 2016: A National Overview*. London.

Jackson, B., & Bradford, B. (2009). Crime, Policing and Social Order: On the Expressive Nature of Public Confidence in Policing. *British Journal of Sociology*, *60*(3), 493–521.

Jackson, J., Bradford, B., Hough, M., Myhill, A., Quinton, P., & Tyler, T. R. (2012). Why do people comply with the law? Legitimacy and the influence of legal institutions. *British Journal of Criminology*, *52*(6), 1051-1071.

Jackson, B., & Stafford, M. (2009). Public Health and Fear of Crime: A Perspective Cohort Study. *British Journal of Criminology*, *49*(6), 832–847.

Kawachi, I., & Berkman, L. F. (2000). Social Cohesion, Social Capital, and Health, In L.F. Berkman, & I. Kawachi (Eds.), *Social Epidemiology* (pp. 174–190). New York: Oxford University Press.

LaGrange, R. L., Ferraro, K. F., & Supancic, M. (1992). Perceived Risk and Fear of Crime: Role of Social and Physical Incivilities. *Journal of Research in Crime and Delinquency*, *29*(3), 311–334.

Leana, C. R., & Pil, F. K. (2006). Social Capital and Organizational Performance: Evidence from Urban Public Schools. *Organization Science*, *17*(3), 353–366.

Lederman, D., Loayaza, N., & Menédez, A. M. (2002), Violent Crime: Does Social Capital Matter? *Economic Development and Cultural Change*, *50*(3), 509–539.

Lloyd, K., & Foster, J. (2009). *Citizen Focus and Community Engagement: A Review of the Literature*. London: The Police Foundation.

Lum, C., Johnson, D., Nichols, J., Grieco, J., & Wu, X. (2016). *The Fairfax Community Survey of the Fairfax County Police Department*. Virginia: Center for Evidence-Based Crime Policy, George Mason University.

MacDonald, J., and Stokes, R. J. (2006).Race, Social Capital, and Trust in the Police. *Urban Affairs Review*, *41*(3), 358–375.

MacQueen, S., & Bradford, B. (2015). Procedural Justice in Practice: Findings from the Scottish Community Engagement Trial (ScotCET). *Scottish Justice Matters*, *3*(2), 11–12.

Moore, M. D., & Recker, N. L. (2016). Social Capital, Type of Crime, and Social Control. *Crime & Delinquency*, *62*(6), 728–747.

Muthén, L. K., & Muthén, B. O. (2010). *MPlus User's Guide. Sixth Edition*. Los Angeles, CA: Muthén & Muthén.

Myhill, A. (2012). *Community Engagement in Policing: Lessons from the Literature*. London: National Policing Improvement Agency.

Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review*, *23*(2), 242–266.

Nix, J., Wolfe, S. E., Rojek, J., & Kaminski, R. J. (2015). Trust in the Police: The Influence of Procedural Justice and Perceived Collective Efficacy. *Crime & Delinquency*. *61*(4), 610–640.

Pate, A. M., Wycoff, M. A., Skogan, W. G., & Sherman, L. W. (1986). *Reducing Fear of Crime in Houston and New York: A Summary Report*. Washington, DC: Police Federation.

Quinton, P., & Tuffin, R. (2007). Neighbourhood Change: The Impact of the National Reassurance Policing Programme. *Policing*, *1*(2), 149–160.

Ren. L., Cao., L., Lovrich, N., & Gaffney, M. (2005). Linking Confidence in the Police with the Performance of the Police: Community Policing Can Make a Difference. *Journal of Criminal Justice*, *33*(1), 55–66.

Scantlebury, A., McDaid, C., Booth, A., Fairhurst, C., Parker, A., Payne, R, … & Hewitt, C. (2017). Undertaking a randomised controlled trial in the police setting: methodological and practical challenges. *Trials*, *1*(18), 1-7.

Shea, G. P., & Guzzo, R. A. (1987). Groups as Human Resources, in K. M Rowland & G. R. Ferris (Eds), *Research in Human Resources and Personnel Management* (pp. 323–356). Greenwich, CT: JAI Press.

Skogan, W. G., & Steiner, L. (2004). *Community Policing in Chicago, Year Ten*. Chicago: Illinois Criminal Justice Information Authority.

Smith, J. (2007). *Cutting Crime: A New Partnership 2008-11*. London: Home Office.

Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social Networks and the Performance of Individuals and Groups. *Academy of Management Journal*, *44*(2), 316–325.

Stajkovic, A. D., Lee, D., & Nyberg, A. (2009). Collective Efficacy, Group Potency, and Group Performance: Meta-Analyses of Their Relationships, and Test of a Mediation Model. *Journal of Applied Psychology*, *94*(3), 814–828.

Stevens, L. (2013). *Policing for a Better Britain: Report of the Independent Police Commission*. London: Independent Police Commission.

Tyler, T. R. (2004). Enhancing police legitimacy. *The Annals of the American Academy, 593*: 84-99.

Vieno, A., Lenzi, M., Roccato, M., Russo, S., & Monaci, M. G. (2016). Social Capital and Fear of Crime in Adolescence: A Multilevel Study. *American Journal of Community Psychology 1*(2), 100–110.

Yuan, Y., & McNeeley, S. (2016). Social Ties, Collective Efficacy, and Crime-Specific Fear in Seattle Neighborhoods. *Victims & Offenders*, *12*(1), 90–112.

Wright, R. (2018, March 22). Innovative policing helps Durham manage funding cuts. *The Financial Times*. Retrieved from https://www.ft.com/.

Zaccaro, S. J., Blair, U., Peterson, C., & Zazanis, M. (1995). Collective efficacy. In J. E. Maddux (Ed.), *Self-efficacy, adaptation, and adjustment* (pp. 305–328). New York: Plenum.

Appendix: Items for Primary Measures

Social Capital (adapted from Leana and Pil, 2006)

1. People in this local area engage in open and honest communication with one another.
2. People in this local area willingly share information with one another.
3. People in this local area discuss personal issues if they affect the community.
4. I can rely on the people in this local area.
5. People have confidence in one another in this local area.
6. Overall, people in this local area are trustworthy.
7. People in this local area share ambitions and visions for the local area.
8. There is a commonality of purpose among people in this local area.
9. People in this local area view themselves as partners in influencing the local area's direction.

Local Area Potency (adapted from Guzzo et al.,1993)

1. This local area has confidence in itself.
2. This local area believes it can become unusually good at producing high-quality outcomes on crime reduction/prevention.
3. This local area feels it can solve any problems it encounters.
4. This local area can get a lot done when it works hard.
5. No task is too tough for this local area.

Fear of Crime

1. In the past few months, how often, if at all, have you been afraid of...being burgled?
2. ...being physically assaulted?
3. ...having your car stolen?
4. ...having your property damaged by vandals?
5. ...having property stolen from your car?
6. ...being insulted or pestered by somebody in the street or any other public space?

Items 1, 2, 3 and 6 adapted from the 2003/2004 British Crime Survey, as used by Jackson and Bradford (2009).

Item 4 adapted from the Fear of Crime in America survey, as used by LaGrange et al. (1992).

Item 5 adapted from the Whitehall II survey, as used by Jackson and Stafford (2009).

Police Community Focus

1. The police in this local area can be relied upon to be there when you need them.
2. The police in this local area work with citizens together in solving problems.
3. The police in this local area can be relied upon to deal with minor crimes.
4. They are dealing with the things that matter to people in this local area.
5. They understand the issues that affect this local area.

Items 1, 3, 4 and 5 adapted from the 2005/2006 British Crime Survey, as used by Bradford et al. (2008).

Item 2 adapted from Ren et al. (2005).

Confidence in the Police

1. How good a job do you think the police are doing in this local area?
2. The police are dealing with the anti-social behaviour and crime issues that matter in this local area.
3. Taking everything into account I have confidence in the police in this local area.

Item 1 developed by the authors.

Items 2 and 3 adapted from the 2005/2006 British Crime Survey, as used by Bradford et al. (2008).

Table 1

Change in Demographic Variable Means over Time in Intervention and Control Areas

Variables	Area	Time 1	Time 2	Significance
Gender	Intervention	.53	.53	.931
	Control	.50	.52	.663
Age	Intervention	61.98	65.56	.050
	Control	60.55	62.38	.227
Tenure	Intervention	31.09	33.23	.393
	Control	24.66	25.26	.688
Rent	Intervention	.51	.47	.433
	Control	.40	.39	.851
Victim of Crime	Intervention	.13	.16	.515
	Control	.17	.13	.187

Note. *n* ranges from 349 to 469.
Control variables are coded as follows: Age and Tenure: number of years.
Gender: 0 = male, 1 = female. Rent and Victim of Crime: 0 = no, 1 = yes.

Table 2

Study Means, Standard Deviations, Alphas, and Correlations

Variable	M	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Age	62.28	15.73	--										
2. Gender	0.52	0.50	-.11**	--									
3. Tenure	27.98	19.90	.35**	-.10**	--								
4. Rent	0.44	0.50	-.10**	.10**	-.15**	--							
5. Heard of Intervention	0.02	0.14	-.01	-.07	-.01	.03	--						
6. Victim of Crime	0.15	0.40	-.13**	-.01	-.10**	.07*	.11*	--					
7. Social Capital	4.31	1.40	.27**	.01	.06	-.07	.03	-.18**	(.97)				
8. Local Area Potency	4.15	1.28	.16**	-04	.07*	-.02	.04	-.22**	.67**	(.92)			
9. Fear of Crime	2.15	1.07	-.18**	-.05	-.02	-.01	.06	.26**	-.40**	-.43**	(.90)		
10. Confidence in Police	4.70	1.42	.18**	.09*	.02	-.03	.06	-.19**	.49**	.55**	-.45**	(.92)	
11. Community Focus	4.59	1.45	.13**	.12**	.02	.04	.08	-.14**	.48**	.53**	-.37**	.83**	(.95)

Note. n ranges from 715- 829. M = Mean. S.D. = Standard deviation. Control variables are coded as follows: Age and Tenure: number of years.

Gender: 0 = male, 1 = female. Rent, Heard of Intervention, and Victim of Crime: 0 = no, 1 = yes. Cronbach's α displayed in parentheses on the diagonal.

*$p < .05$; **$p < .01$

Table 3

Intervention Review: Independent *t*-Tests and Differences-in-Differences (DiD) Results

Variables	Area	Time 1	Time 2	*t*-test: mean difference change *(p)*	DiD *(p)*
Social Capital	Intervention	4.16	4.60	**.44** (.005)	**-.29** (.047)
	Control	4.24	4.31	.07 (.597)	
Local Area Potency	Intervention	3.90	4.45	**.55** (< .001)	**-.59** (.011)
	Control	4.08	4.22	.14 (.240)	
Confidence in Police	Intervention	4.50	5.10	**.60** (< .001)	-.26 (.127)
	Control	4.49	4.84	**.35** (.009)	
Community Focus	Intervention	4.44	4.99	**.55** (.001)	**-.38** (.037)
	Control	4.43	4.61	.18 (.180)	
Fear of Crime	Intervention	2.25	1.95	**-.30** (.014)	.21 (.051)
	Control	2.20	2.16	-.04 (.761)	

Note. *n* ranges from 291 to 689.

Significant results are shown in bold typeface.

Figure 1 - Conceptual Model

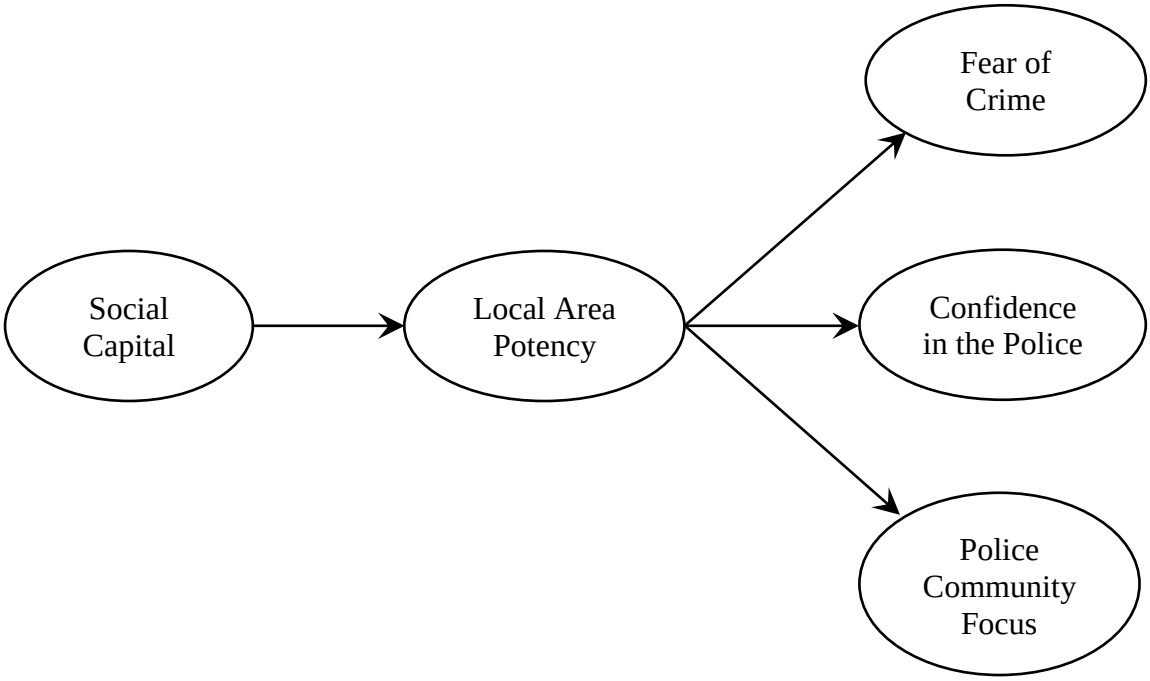
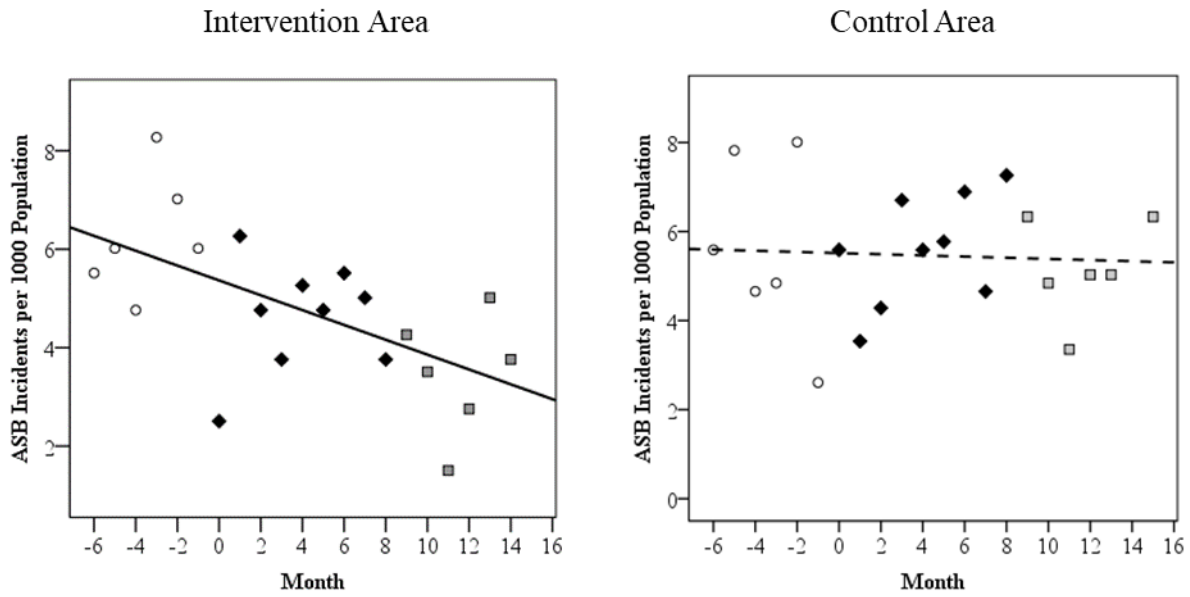
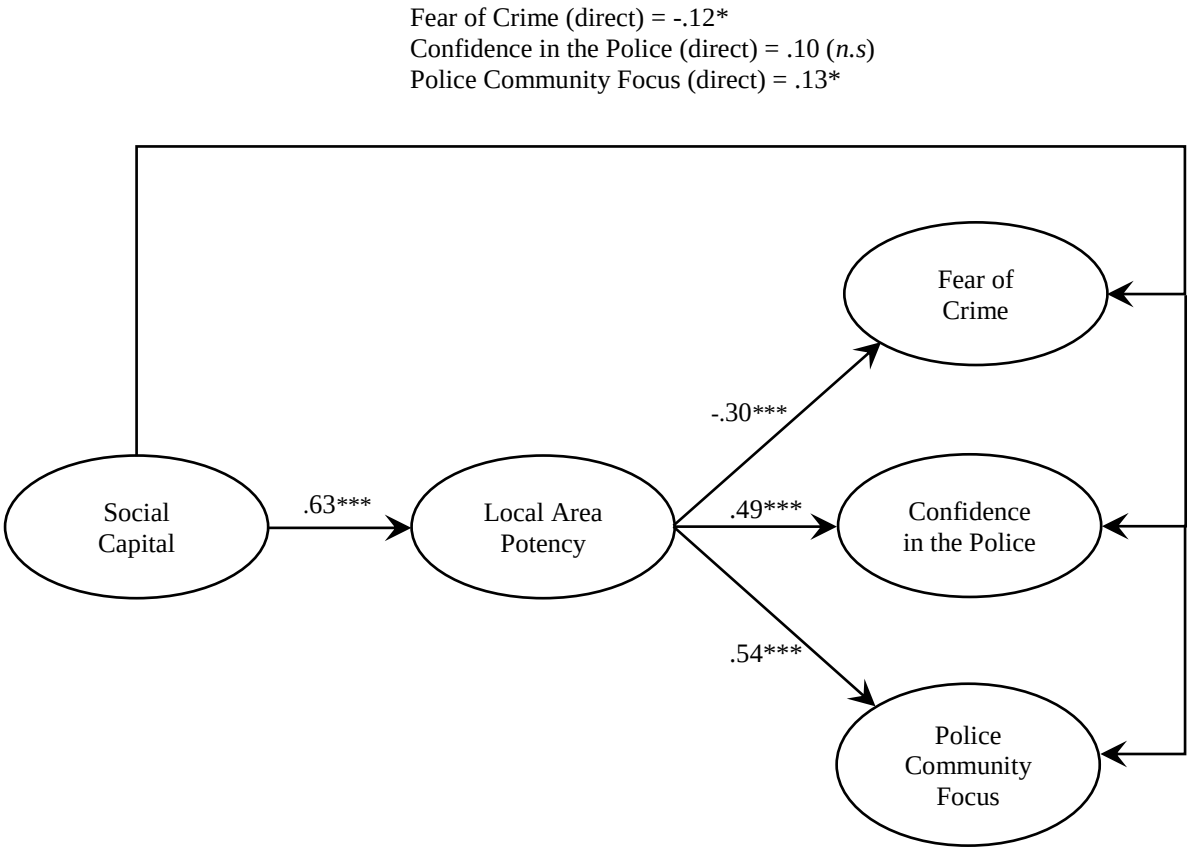


Figure 2. ASB Statistics for the Intervention and Control Areas



Note. The intervention commenced at month 0 and continued until month 8.
Markers indicate: ○ Prior to the intervention, ◆ during the intervention, and □ after the intervention.

Figure 3. SEM Results of the Hypothesised Model



Note. n = 766.

Controls are not shown for ease of presentation.

Unstandardized regression coefficients are shown.

*p < .05, ** p < .01, *** p < .001,